Title (en)

Grating-coupled surface emitting laser and method for the modulation thereof.

Title (de)

Über ein Gitter gekoppelter, aus seiner Oberfläche strahlender Laser und Verfahren zu seiner Modulation.

Title (fr)

Laser à émission de surface à couplage par réseau et méthode pour sa modulation.

Publication

EP 0322180 A2 19890628 (EN)

Application

EP 88312036 A 19881219

Priority

- JP 8869788 A 19880411
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- JP 32170787 A 19871219

Abstract (en)

Disclosed is a grating-coupled surface emitting laser capable of obtaining a beam with high directivity, structured by forming a light output window (22) in a limited regions with high intensity radiations along the propagation direction. Its intensity distribution of radiation mode along the axis can be controlled by injecting a current independently into the multiply-divided electrodes (21a, 21b) or by pumping optically these electrodes independently. The control is, in principle, achieved by an equivalent change of the phase-shift of the gratings (2).

IPC 1-7

H01S 3/06; H01S 3/08; H01S 3/103

IPC 8 full level

H01S 5/00 (2006.01); **H01S 5/042** (2006.01); **H01S 5/06** (2006.01); **H01S 5/12** (2021.01); **H01S 5/187** (2006.01); H01S 5/062 (2006.01)

CPC (source: EP KR US)

H01S 5/04256 (2019.07 - EP US); **H01S 5/12** (2013.01 - EP KR US); **H01S 5/187** (2013.01 - EP KR US); H01S 5/0425 (2013.01 - KR); H01S 5/04253 (2019.07 - EP US); H01S 5/04254 (2019.07 - EP US); H01S 5/06213 (2013.01 - EP KR US)

Cited by

EP0554012A3; GB2384617A; GB2384617B; EP2913902A1; US10386581B2; WO9222946A1; WO2018009538A1; US9548589B2; US9703043B2

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